

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015267**Date Inspected:** 18-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	N/A	<b>CWI Present:</b>	Yes	No			
<b>Inspected CWI report:</b>	Yes	No	N/A	<b>Rod Oven in Use:</b>	Yes	No	N/A
<b>Electrode to specification:</b>	Yes	No	N/A	<b>Weld Procedures Followed:</b>	Yes	No	N/A
<b>Qualified Welders:</b>	Yes	No	N/A	<b>Verified Joint Fit-up:</b>	Yes	No	N/A
<b>Approved Drawings:</b>	Yes	No	N/A	<b>Approved WPS:</b>	Yes	No	N/A
				<b>Delayed / Cancelled:</b>	Yes	No	N/A
<b>Bridge No:</b>	34-0006	<b>Component:</b>	OBG Components				

**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, S.Chandrakumar was present during the times noted above for observations relative to the work being performed.

Orthotropic Box Girder (OBG) Trial Assembly Areas

Segment 8AW to 8BW (Longitudinal Diaphragm) Joint Survey

This QA Inspector performed Joint Inspection with ZPMC Survey Team and ABF Survey Team for the Longitudinal Diaphragm between Segment 8AW to 8BW (Shop Segment Splice) between Panel Point (PP) 64 and PP 65 North(Counter Weight Side) and South (Cross Beam side) side for Offset and Sweep. The offset was measured at 5 (five) different locations in which 2 (Two) locations were at Flange area and 3 (Three) locations were at Web area and Sweep was measured at 100 mm from both side from the Floor Beam and 800mm from both side of floor Beam and at Centre (Total 5 Locations). The measured readings were recorded on Dimension Control Form and were submitted to the Lead and Engineer for review.

Segment 7BW to 7CW (Longitudinal Diaphragm) Joint Survey

This QA Inspector performed Joint Inspection with ZPMC Survey Team and ABF Survey Team for the Longitudinal Diaphragm between Segment 8AW to 8BW (Shop Segment Splice) between Panel Point (PP) 55 and PP 56 North(Counter Weight Side) and South (Cross Beam side) side for Offset and Sweep. The offset was measured at 5 (five) different locations in which 2 (Two) locations were at Flange area and 3 (Three) locations were at Web area and Sweep was measured at 100 mm from both side from the Floor Beam and 800mm from both side of floor Beam and at Centre (Total 5 Locations). The measured readings were recorded on Dimension Control

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Form and were submitted to the Lead and Engineer for review.

Segment 7DW to 7EW (Tension verification)

U-Ribs

This Quality Assurance (QA) Inspector witnessed final tension verification for U-Rib to U-Rib at Panel Point (PP) 58 and PP 59 for Segment 7DW to 7EW. Inspected the Big Reinforcing Splice Plate installed area at U-Rib locations at 30th on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00394 Dated June 18, 2010.

Bolt sizes used were M22 x 65 RC Set# DHGM220035 and final torque required was 433 N-m,

Bolt sizes used were M22 x 65 RC Set# DHGM220092 and final torque required was 466 N-m,

Bolt sizes used were M22 x 80 RC Set# DHGM220091 and final torque required was 460 N-m,

Bolt sizes used were M22 x 85 RC Set# DHGM220104 and final torque required was 380 N-m.

Note: U-Ribs numbering reference taken from Cross Beam as 1st U-Rib and Bike Path side as 39th U-Rib.

T-Ribs

This Quality Assurance (QA) Inspector witnessed final tension verification for T-Rib to T-Rib at Panel Point (PP) 58 and PP 59 for Segment 7DW to 7EW. Inspection was performed against the Notification No. 00394 Dated June 18, 2010.

Bolt sizes used were M22 x 65 RC Set# DHGM220035 and final torque required was 433 N-m,

Bolt sizes used were M22 x 70 RC Set# DHGM220017 and final torque required was 487 N-m,

Corner assembly @ PP51-PP52, PP55-PP56, PP58-PP59.

This Quality Assurance (QA) Inspector witnessed final tension verification for Corner assembly at Panel Point (PP) 51-52, PP55-56, and PP58 -59for Segment 7AW to 7EW. Inspection was performed against the Notification No. 00394 Dated June 18, 2010.

Bolt sizes used were M22 x 55 RC Set# DHGM220044 and final torque required was 473 N-m,

Bolt sizes used were M22 x 85 RC Set# DHGM220096 and final torque required was 583 N-m,

Bolt sizes used were M22 x 120 RC Set# DHGM220051 and final torque required was 433 N-m,

Bolt sizes used were M24 x 60 RC Set# DHGM240014 and final torque required was 567 N-m.

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Bolt sizes used were M24 x 65 RC Set# DHGM220009 and final torque required was 567 N-m,

Bolt sizes used were M24 x 80 RC Set# DHGM240011 and final torque required was 533 N-m.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



### Summary of Conversations:

No relevant Conversation.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang-15--0042-2372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Kumar,Chadra	Quality Assurance Inspector
<b>Reviewed By:</b>	McClendon,Timothy	QA Reviewer

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